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(54) Title: ARYLSULFATES AND THEIR USE AS ENHANCERS OR INHIBITORS OF BIOADHESION TO SURFACES

(57) Abstract: One aspect of the present invention relates to compounds, comprising at least two moieties selected from the group consisting of aryl sulfonates and aryl sulfates. A second aspect of the present invention relates to combinatorial libraries of the aforementioned compounds. The present invention also relates to compositions comprising a compound of the present invention. A fourth aspect of the present invention relates to the use of a compound or composition of the present invention in a method for inhibiting bioadhesion to a surface. Another aspect of the present invention relates to the use of a compound or composition of the present invention in a method for enhancing bioadhesion to a surface.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/10969

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07C305/24 C07D211/22 C07D207/08 C07D295/08 C07D303/46  
A01N41/02 A01N43/36 A01N43/40 A01N43/60 A01N43/02  
C07B61/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07C C07D C07B C09D A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

CHEM ABS Data, BEILSTEIN Data, WPI Data, EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	S. INOUE ET AL: TETRAHEDRON LETT., no. 34; 1976, pages 2971-2974, XP002185675 page 2972, compound III ---	1-13
X	M. AXELSON ET AL: FEBS LETT., vol. 123, no. 2, 1981, pages 337-342, XP000926730 page 337, compound I ---	1-13
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X	EP 0 821 002 A (KYOWA HAKKO KOGYO CO LTD) 28 January 1998 (1998-01-28) page 4, compounds I-4 - I-5 --- -/--	1-13

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

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International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	D.B. AMABILINO ET AL: RECL. TRAV. CHIM. PAYS-BAS, vol. 112, 1993, pages 429-430, XP001050468 scheme 1 ---	1-4,6-8, 10,12
X	F. VEZNIK ET AL: HELV. CHIM. ACTA, vol. 74, no. 3, 1991, pages 654-661, XP002089913 page 659, compounds 16-17 ---	1-4,6-8, 10,12
X	W.J. DALE ET AL.: J. AM. CHEM. SOC., vol. 78, 1956, pages 2543-2547, XP002185676 page 2546, column 2, line 11 ---	1-4,6-8, 10,12
A	WO 94 13462 A (ARCH DEVELOPMENT CORP ET AL) 23 June 1994 (1994-06-23) the whole document ---	1,21, 23-25
A	WO 00 16623 A (PHYCOGEN INC) 30 March 2000 (2000-03-30) the whole document ---	1,21, 23-27
P,X	L.A. SAUDAN ET AL: SYNLETT, no. 4, 2000, pages 483-486, XP001050467 scheme 1, compound 9 -----	1-4,6-8, 10,12

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## Continuation of Box I.2

Present claims 1-9 relate to an extremely large number of possible compounds. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely claims 10-18.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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